

Appl. No.: 10/732,942
Amdt. dated: 6/24/2005
Reply to Office Action of March 10, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended). A battery charge indicator for sensing and indicating a near full state of charge of a lithium ion battery, the battery charge indicator comprising:

a sensing circuit for sensing when the charging current to a said lithium ion battery is equal to a first predetermined value less than the value of ~~the~~ said charging current when said lithium ion battery is ~~fully-charged in a constant current mode of operation~~ and generating a first charge indication signal ~~as a function of~~ when said charging current; is less than or equal to said first predetermined value ~~representative of~~ representing a near full state of charge; and

an indicator responsive to said first charge indication signal for providing an indication ~~when the state of charge of~~ when said lithium ion battery is at a near full state of charge.

Claim 2 (Original). The battery charge indicator as recited in claim 1, wherein said indicator includes a first visual indication.

Claim 3 (Original). The battery charge indicator as recited in claim 2, wherein said first visual indication is a first light emitting diode (LED).

Claim 4 (Original). The battery charge indicator as recited in claim 2, wherein said sensing circuit is configured to sensing other charging states of said battery, other than said near full state of charge.

Claim 5 (Previously Presented). The battery charge indicator as recited in claim 4, wherein said sensing circuit is configured to sense when the battery charging current is less than said first predetermined value and generating a second charge indication signal representing that said charging current is at a charge state other than said near fully charged state.

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Claim 6 (Original). The battery charge indicator as recited in claim 5, further including a second visual indication.

Claim 7 (Previously Presented). The battery charge indicator as recited in claim 4, wherein said sensing circuit is configured to generate one or more charge indicating signals selected from the group indicating that the state of charge of said battery is at; a state of charge near full charge; at full charge or between said near charge state and said fully charged state.

Claim 8 (Previously Presented). The battery charge indicator as recited in claim 6, wherein said second visual indication is a second LED.

Claim 9 (Previously Presented). The battery charge indicator as recited in claim 7, wherein sensing circuit is configured to define first, second and third charging states and wherein said first LED is a red LED and said second LED is a green LED and in said first state, said red LED is illuminated and in said second state both said red and green LEDs are illuminated and in said third state, only said green LED is illuminated.